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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,919	06/21/2001	Rodrigo Munoz	G03.011	6655

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BUCKLEY, MASCHOFF, TALWALKAR, & ALLISON
5 ELM STREET
NEW CANAAN, CT 06840

EXAMINER

FELTEN, DANIEL S

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 09/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/886,919

Applicant(s)
Munoz

Examiner
Daniel Felten

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jun 21, 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tom (US 5,696,907) .

Regarding claims 1-3:

Tom discloses a method of evaluating an application for an financial product (see Tom, Abstract), comprising:

receiving application data (see Tom, col. 3, ll. 43-62);
calculating, based at least in part one application data, expected loss data (see Tom, at least col. 2, ll. 9-24); and

Tom fails to disclose calculating, based at least in part on the expected loss data, a return on investment for the application. However, since the invention's objective is to minimize loss and provide business expansion (see Tom, at least col. 2, ll. 9-24; col. 2, ll. 18-21), it would have been obvious for an artisan of ordinary skill at the time of the invention of Tom to expect a greater return on investment for reduction of loss because such a feature would inherently be the inverse effect of a reduction of loss in the system. In other words, an

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1 increase in the return on investment would be what the one of ordinary skill in the art would
2 expect when losses are reduced. Thus such a feature would have been obvious to one of
3 ordinary skill in art.
4

5 **Regarding claim 4:**

6 wherein the application data includes at least one of a collateral identifier, credit related
7 information and payment information (see Tom, col. 3, ll. 40-62)
8

9 **Regarding claim 5:**

10 wherein the calculating expected loss data comprises: executing an account level loss forecast
11 model; executing a terminal event model; and calculating expected lost data in response to the
12 execution of the account level loss forecast model and the execution of the terminal event
13 model (see Tom, col. 6, ll. 47+)
14

15 **Regarding claim 6:**

16 wherein executing an account level loss forecast model further comprises: calculating future
17 value for an item of collateral associated with the application (see Tom, col. 6, ll. 47+)
18

19 **Regarding claim 7:**

20 wherein calculating expected loss data further comprises: storing price tier data; executing a
21 risk model to compute a credit risk; assigning the credit risk to a price tier based on the price
22 tier data; and generating probabilities of one or more of the termination events occurring
23 before the expiration to form one or more termination scenarios (see Tom, col. 6, ll. 47+).

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1 **Regarding claim 8:**

2 the calculating a return on investment further comprises: forecasting the severity of loss of the
3 termination scenarios to form one or more loss scenarios; calculating net income and
4 annualized net investment for the loss scenarios; determining expected net income and expected
5 annualized net investment in response to the calculating; and determining expected return on
6 investment based on a ratio comprising expected net income and the expected annualized net
7 investment (see Tom, col. 6, ll. 47+).

8
9
10 **Regarding claim 9:**

11 wherein the generating probabilities further comprises:
12 generating probabilities of the termination events occurring in relation to a plurality of
13 the payment times (see Tom, col. 6, ll. 47+).

14
15 **Regarding claim 10:**

16 wherein the forecasting the severity of loss further comprises:
17 forecasting the severity of loss of the termination scenarios for at least a plurality of the
18 payment times (see Tom, col. 6, ll. 47+)

19
20 **Regarding Claim 11:**

21 wherein said financial product requires an item of collateral and wherein said forecasting
22 comprises: forecasting a current balance on book; forecasting a market value of said collateral;

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1 and calculating a difference between said current balance on book and said market value of said
2 collateral (see Tom, col. 6, ll. 47+).

3
4 **Regarding Claim 12:**

5 wherein said forecasting a market value is performed using at least one of: Winter's
6 multiplicative time series estimation; or an exponential decay between a manufacturer suggested
7 retail price of said collateral and a residual value of said collateral at the expiration (see Tom,
8 col. 6, ll. 47+).

9
10 **Regarding Claim 13:**

11 wherein said financial product is a lease (see Tom, col. 6, ll. 47+).

12
13 **Regarding Claim 14:**

14 wherein said termination events comprise at least one of: repossession with delinquencies, early
15 payoff, insurance loss, and repossession without delinquencies (see Tom, col. 6, ll. 47+).

16
17 **Regarding Claim 15:**

18 wherein said financial product is a loan (see Tom, col. 6, ll. 47+).

19
20 **Regarding Claim 16:**

21 wherein said termination events comprise at least one of: repossession, non-collateralized loss
22 and early payoff (see Tom, col. 6, ll. 47+).

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Regarding Claim 17:

A computer-readable medium bearing a computer program containing instruction steps such that upon installation of said computer program in a general purpose computer, the computer is capable of performing the method of claim 1 (see Tom, col. 2, ll. 18-21); .

Regarding Claim 18:

A method of evaluating an application for a financial product for which at least one price tier has been established, the method comprising:

receiving application data; executing a risk model to compute a credit risk for said application data; assigning said credit risk to a price tier; generating probabilities of one or more termination events occurring before an expiration of said financial product to form one or more termination scenarios; forecasting the severity of loss of said termination scenarios; calculating, based at least in part on said severity of loss of said termination scenarios, a return on investment (ROI) for said application; and approving said application if said calculated ROI is within an expected ROI threshold (see Tom, col. 6, ll. 47+).

Regarding Claim 19:

An apparatus for evaluating an application for a financial product, the apparatus comprising: a processor; a communication device, coupled to said processor, receiving application data from at least a first user device; and a storage device in communication with said processor and storing instructions adapted to be executed by said processor to: calculate, based at least in part on said

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1 application data, expected loss data; and calculate, based at least in part on said expected loss
2 data, a return on investment (ROI) for said application (see Tom, col. 6, ll. 47+).

3
4 **Regarding Claim 20:**

5 The apparatus of claim 18, said storage device further storing instructions adapted to be
6 executed by said processor to: make an application approval decision based on said calculated
7 ROI (see Tom, col. 6, ll. 47+).

8
9 **Regarding Claim 21:**

10 A system for evaluating an application for a financial product for which at least one price tier has
11 been established, the system comprising: at least a first user device having a processor; a
12 communication device, coupled to said processor, configured to send and receive data over a
13 network; and a storage device in communication with said processor and storing instructions
14 adapted to be executed by said processor to receive application data; and forward said application
15 data to an at least first lender device said at least first lender device having a second processor, a
16 second communication device, coupled to said second processor, configured to send and receive
17 data over said network and to receive said application data; and a second storage device in
18 communication with said second processor and storing instructions adapted to be executed by
19 said second processor to execute a risk model to compute a credit risk for said application data;
20 assign said credit risk to a price tier; generate probabilities of one or more termination events
21 occurring before an expiration of said financial product to form one or more termination
22 scenarios; forecast the severity of loss of said termination scenarios; calculate, based at least in

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1 part on said severity of loss of said termination scenarios, a return on investment (ROI) for said
2 application; and approve said application if said calculated ROI is within an expected ROI
3 threshold (see Tom, col. 6, ll. 47+).

4
5
6 **Regarding Claim 22:**

7 A computer program product in a computer readable medium for evaluating an application for a
8 financial product, comprising: first instructions for receiving application data; second
9 instructions for calculating, based at least in part on said application data, expected loss data;
10 third instructions for calculating, based at least in part on said expected loss data, a return on
11 investment (ROI) for said application; and fourth instructions for approving said application if
12 said calculated ROI is within an expected ROI range for said financial product (see Tom, col. 6,
13 ll. 47+).

14
15 **Regarding Claim 23:**

16 A system for evaluating an application for a financial product, the system 3 comprising: means
17 for receiving application data; means for calculating, based at least in part on said application
18 data, 6 expected loss data; and means for calculating, based at least in part on said expected loss
19 data, a return on investment for said application (see Tom, col. 6, ll. 47+).

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1 **Regarding Claim 24:**

2 comprising means for comparing said return on investment with an expected return on
3 investment; and means for making an application approval decision based on said return on
4 investment (see Tom, col. 6, ll. 47+).

7 ***Conclusion***

8
9 3. Any inquiry concerning this communication or earlier communications from the examiner
10 should be directed to ***Daniel S. Felten*** whose telephone number is (703) 305-0724. The
11 examiner can normally be reached between the hours of 7:00AM to 5:30PM Monday-Thursday.
12 Any inquiry of a general nature relating to the status of this application or its proceedings should
13 be directed to the Customer Service Office (703) 306-5631, or the examiner's supervisor
14 ***Vincent Millin*** whose telephone number is (703) 308-1065.

15
16 4. Response to this action should be mailed to:

17
18 Commissioner of Patents and Trademarks

19 Washington, D.C. 20231

20
21 for formal communications intended for entry, or (703) 305-0040, for informal or draft
22 communications, please label "Proposed" or "Draft".

23 Communications via Internet e-mail regarding this application, other than those under 35
24 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be

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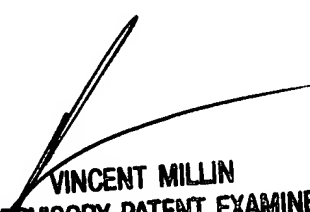
1 addressed to [daniel.felten@uspto.gov].

2 All Internet e-mail communications will be made of record in the application file. PTO
3 employees do not engage in Internet communications where there exists a possibility that
4 sensitive information could be identified or exchanged unless the record includes a properly
5 signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly
6 set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and
7 Trademark on February 25, 1997 at 1 195 OG 89.

8
9 

10 DSF

11 September 19, 2002


VINCENT MILLIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600